	Function	Characteristics
Glycolysis	1) make $\dot{\lambda}_{use}$ pyruvate 2) also some (4) ATP 3) also some (2) NADH	doesn't need O_2 needs $NAD^{\oplus}$
TCA / Krebs (aka)	make (3) NADH & (1) $FADH_2$ (per 1 pyruvate) ($e^{\ominus}$ / $H^{\oplus}$ carriers)	inhibited by too much NADH
ETC	make $H^{\oplus}$ gradient to make fuck ton ($10+10+10+6$) ATP (per 1 pyruvate)	need O_2 uses NADH

most steps are actually unfavorable @ STP (except $\uparrow CO_2$ ones, & some ATP → ADP ones)

but in cells, low product conc. drives rxns forward (aka Le Chatelier's, aka mass action)

ETC:
1) use energy from $e^{\ominus} + O_2 \rightarrow H_2O$ to shove $H^{\oplus}$ across membrane
2) ATP synthase ($3H^{\oplus}$; ADP + P → ATP; $3H^{\oplus}$)

Fermentation / Anaerobic

1) make $NAD^{\oplus}$ for glycolysis

also reduce things using NADH → $NAD^{\oplus}$ so we can get drunk (in yeast/bacterial sometimes fungi: for Asian drinks)

happens when no O_2 / ETC is stopped (too much NADH)

in humans: makes lactic acid → liver eventually turns back into pyruvate when ETC works again

---

So...

w O_2
glycolysis
↓
TCA
↓
ETC

~~O_2~~
glycolysis
↓
anaerobic

TCA ⊢ too much NADH
ETC ⊢ no O_2